



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020 Fax (614) 644-2329

Richard F. Celeste
Governor

CLOSURE PLAN APPROVAL

CERTIFIED MAIL

December 8, 1989

Re: Closure Plan
Synthetic Products Company
OHD 077 783 603/02-18-0071

Mr. John Sundermeyer
Synthetic Products Company
16601 St. Clair Avenue
Cleveland, Ohio 44110

Dear Mr. Sundermeyer:

On October 11, 1988, Synthetic Products Company submitted to Ohio EPA a closure plan for a hazardous waste storage area located at 1636 Wayside Road, Cleveland, Ohio. Revisions to the closure plan were received on October 2, 1989. The closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that Synthetic Products Company's proposal for closure complies with the requirements of OAC Rules 3745-66-11 and 3745-66-12.

The public was given the opportunity to submit written comments regarding the closure plan of Synthetic Products Company in accordance with OAC Rule 3745-66-12. No comments were received by Ohio EPA in this matter.

Based upon review of the company's submittal and subsequent revisions, I conclude that, the closure plan for the hazardous waste facility at Synthetic Products Company meets the performance standard contained in OAC Rule 3745-66-11 and complies with the pertinent parts of OAC Rule 3745-66-12.

The closure plan submitted to Ohio EPA by Synthetic Products Company is hereby approved with the following modifications.

1. Synthetic Products Company (Synpro) shall identify the hazardous waste management unit undergoing closure by the reference line number in the Part A permit application.
2. The topographic map provided by Synpro fails to indicate the specific site location with a mark. Synpro shall indicate the site location on the topographic map.
3. Synpro shall provide estimates of the maximum inventory of each type of hazardous waste (e.g. 40 drums D005 and 40 drums D006) stored at the unit.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavan Date 12-8-89

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DEC 12 1989

4. Synpro shall employ an independent, registered, professional engineer (PE) to oversee closure of the hazardous waste storage area. The PE shall be present to observe and oversee all critical closure activities including, but not limited to, waste removal, unit decontamination, decontamination of equipment, and certification of closure.
5. Synpro shall test the floor residues for EP Toxicity. If the scarification residues are EP Toxic for barium or cadmium, they shall be managed as hazardous waste. If the scarification residues do not exhibit the characteristic of EP Toxicity then they shall be managed as solid waste. Synpro shall ensure proper unit decontamination by rinsing the unit after scarification. The pad shall be considered clean when concentrations of barium and cadmium in the rinseate fall below 1 mg/l and 0.010 mg/l respectively. Rinseate containing concentrations of barium or cadmium greater than EP Toxic concentrations shall be managed as hazardous waste. Synpro shall continue to clean the drum storage pad until clean goals are fulfilled.
6. Synpro shall ensure that all equipment used during activities shall be decontaminated or disposed as hazardous waste. All decontamination residue shall be managed appropriately.
7. Closure certification shall be provided by both the owner/operator of Synpro and the independent PE.
8. Synpro shall clarify the status of the unit and facility after closure of the drum storage area. Synpro shall explicitly state the new status of the unit (e.g. generator status with less than 90-day storage) following closure. Upon completion of closure and an inspection by Ohio EPA certifying completion of closure in accordance with the approved closure plan, Synpro shall submit a permit withdrawal request as per OAC 3745-50-74.
9. Synpro shall submit the information requested above in numbers 1,2,3, & 8 to Kay Springer, Ohio EPA, NEDO and Paul Vandermeer, Ohio EPA, Central Office within 30 days of the receipt of this letter.

Please be advised that approval of this closure plan does not release Synthetic Products Company from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

Notwithstanding compliance with the terms of the closure plan, the Director may, on the basis of any information that there is or has been a release of hazardous waste, hazardous constituents, or hazardous substances into the environment, issue order pursuant to Section 3734.20 et seq of the Revised Code or Chapters 3734 or 6111 of the Revised Code requiring corrective action or such other response as deemed necessary; or initiate appropriate action; or seek any appropriate legal or equitable remedies to abate pollution or contamination or to protect public health or safety or the environment.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Corin Date 12-8-89

Ohio Environmental Protection Agency
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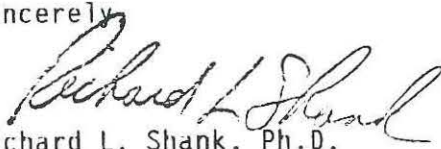
DEC -8 1989

Nothing here shall waive the right of the Director to take action beyond the terms of the closure plan pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499 ("CERCLA") or to take any other action pursuant to applicable Federal or State law, including but not limited to the right to issue a permit with terms and conditions requiring corrective action pursuant to Chapters 3734 or 6111 of the Revised Code; the right to seek injunctive relief, monetary penalties and punitive damages, to undertake any removal, remedial, and/or response action relating to the facility, and to seek recovery for any costs incurred by the Director in undertaking such actions.

You are notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Enforcement Section of the Office of the Attorney General within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent registered professional engineer that the facility has been closed in accordance with the approved closure plan. The certification by the owner or operator shall include the statement found in OAC 3745-50-42(D). These certifications should be submitted to: Ohio Environmental Protection Agency, Division of Solid and Hazardous Waste Management, Attn: Thomas Crepeau, Program Planning and Management Section, P.O. Box 1049, Columbus, Ohio 43266-0149.

Sincerely,


Richard L. Shank, Ph.D.
Director

RLS/PV/pas

cc: Paul Vandermeer, Ohio EPA, DSHWM
Joel Morbito, USEPA - Region V
Kay Springer, NEDO, Ohio EPA

Lisa Pierard, USEPA-Region V
Tom Crepeau, Ohio EPA, DSHWM

2018U

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Carr Date 12-8-89

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DEC -8 1989



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

Richard F. Celeste
Governor

CLOSURE PLAN DISAPPROVAL
Issuance Date July 6, 1989
Effective Date August 7, 1989

CERTIFIED MAIL

July 6, 1989

Re: Closure Plan
Synthetic Products Co.
OHD 077 783 603/02-18-0071

Mr. John Sundermeyer
Synthetic Products Co.
16601 St. Clair Avenue
Cleveland, OH 44110

Dear Mr. Sundermeyer:

On October 11, 1988, Synthetic Products Co. submitted to Ohio EPA a closure plan for a hazardous waste storage area located at 1636 Wayside Road, Cleveland, Ohio. The closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that Synthetic Products Co.'s proposal for closure complies with the requirements of OAC Rules 3745-66-11, 3745-66-12 and 3745-66-18.

The public was given the opportunity to submit written comments regarding the closure plan of Synthetic Products Co. in accordance with OAC Rule 3745-66-12 and 3745-66-18. The public comment period extended from November 14, 1988, to December 19, 1988. No comments were received by Ohio EPA in this matter.

Based upon review of the company's submittal and subsequent revisions, I conclude that the closure plan for the hazardous waste facility at Synthetic Products Co. does not meet the performance standard contained in OAC Rule 3745-66-11 and does not comply with the pertinent parts of OAC Rule 3745-66-12 and 3745-66-18.

The closure plan submitted to Ohio EPA by Synthetic Products Co. is hereby disapproved (see Attachment A).

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AUG 07 1989

By Carolyn Nicodemus Date 8/7/89

You are notified that this action of the Director is issued as a proposed action pursuant to ORC Section 3745.07. This action will become final on the effective date indicated unless you or an objector files an appeal requesting an adjudication hearing within thirty (30) days of the date of issuance of this action. The adjudication hearing will be conducted in accordance with OAC Chapter 3745-47. The request for a hearing shall specify the issues of fact and law to be contested. Requests for hearings shall be sent to: Ohio Environmental Protection Agency, Hearing Clerk, 1800 WaterMark Drive, P.O. Box 1049, Columbus, OH 43266-0149.

A modified closure plan addressing the deficiencies enumerated in Attachment A must be submitted to the Director of the Ohio EPA for approval within thirty (30) days of the receipt of this letter in accordance with OAC 3745-66-12 and 3745-66-18. The modified closure plan should be submitted to: Ohio Environmental Protection Agency, Division of Solid and Hazardous Waste Management, Attn: Thomas Crepeau, Manager, Data Management Section, P.O. Box 1049, Columbus, Ohio 43266-0149. A copy should also be sent to: Kathryn Springer, Ohio EPA, Northeast District Office, 2110 East Aurora, Twinsburg, Ohio 44087.

Sincerely,



Richard L. Shank, Ph.D.
Director

RLS/PV/ps

cc: DSHWM Central File, Ohio EPA
Lisa Pierard, USEPA, Region V
Kathryn Springer, NEDO, Ohio EPA
Paul Vandermeer, DSHWM, Ohio EPA
Joel Morbito, USEPA, Region V

1899U

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Carolyn Nicodenus Date 8/7/89

Ohio Environmental Protection Agency
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ATTACHMENT A

Synthetic Products Co.
OHD 077 783 603/02-18-0071

1. Synthetic Products (Synpro) shall provide information and a drawing regarding the construction details of the container storage building and include the period of use of the storage area.
2. Synpro shall revise the closure plan to include a topographic or county map indicating the location of the facility within the surrounding area. The company shall also provide a detailed facility map showing the location of the container storage area in relation to the rest of the facility. Additionally, Synpro shall provide a detailed scale drawing or sketch of the hazardous waste management unit. All maps shall include a scale.
3. Synpro shall revise the closure plan to include a detailed schedule of closure. The closure schedule shall contain all critical closure events (e.g. decontamination, waste removal, sampling activities, etc.) including events for which the independent, registered professional engineer (PE) or his/her representative will be present.
4. The proposal put forth by Synpro to begin closure of the container storage area in the year 2000 is unacceptable. If the company desired to operate the unit for this length of time, they should have pursued a Part B permit. Closure of the unit shall begin at the date of the approval of the closure plan. Following closure of the unit, the company shall indicate whether the unit is to revert to "generator only" status or be permanently removed from use.
5. Synpro shall revise the closure plan to clearly indicate health and safety measures to be followed during closure activities. This shall include details on personal protective equipment to be worn by personnel performing closure, protection of any contractors or visitors on-site, fire prevention, and emergency procedures as well as other health and safety concerns.
6. Synpro shall revise the closure plan to account for and control nuisance dust emissions, especially if contaminated soil removal is required.
7. Synpro shall revise the closure plan to include a soil sampling and analysis plan unless the company can conclusively demonstrate that hazardous waste were not spilled or leaked around the pad area. The

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By: Carolyn McAdams Date 8/7/89

AUG 07 1989

soil sampling and analysis plan shall include (but not be limited to) the following items:

- o Parameters to be analyzed (i.e. barium and cadmium);
 - o Sample locations, including surface locations on a map and sample depths;
 - o Detailed sampling methods and equipment including decontamination of sampling equipment between samples;
 - o Use of USEPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition for sample analyses for total metals and EP Toxic metals;
 - o QA/QC plan for laboratory analysis in addition to chain-of-custody procedures;
8. Synpro shall revise the closure plan to include "clean" standards for contaminated soils. Soils shall be considered "clean" when concentrations of total barium and total cadmium fall below background concentrations for those constituents. Contaminated soils containing concentrations of barium and cadmium that rise above background, but do not exhibit the characteristic of EP Toxicity shall be managed as solid waste. Soils exhibiting the characteristic of EP Toxicity for barium or cadmium shall be managed as hazardous waste.
9. In order to determine background (if needed), Synpro shall take a minimum of sixteen (16) background soil borings. The company shall sample similar soil horizons in each background boring as those sampled near the pad. Background sample borings shall be taken from areas unimpacted by any waste management activities. Synpro shall choose background sampling locations in conjunction with Kay Springer, Ohio EPA, NEDO and Paul Vandermeer, Ohio EPA, Central Office. Ohio EPA reserves the right to review background sampling results and reject any samples not representative of background.
10. Synpro shall revise the closure plan to include standards for pad and equipment decontamination. The pad shall be considered "clean" when samples of the sand and pad residues gathered after sandblasting do not show concentrations of barium or cadmium above that of the "clean" sand prior to sandblasting. (i.e. Synpro shall measure concentrations of total barium and total cadmium in the "clean" sand prior to sandblasting and compare that to the "used" sand after sandblasting). All "used" sand and residue shall be disposed as solid waste unless samples reveal it is EP Toxic for barium or cadmium in which case, "used" sand and residues shall be disposed as hazardous waste. Both EP Toxicity and total metals tests for barium and cadmium shall be performed on "used" sand.

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AUG 07 1989

By: Carolyn Nicodemus Date: 8/7/89

Equipment shall be scraped and washed during decontamination. Solid residues shall be disposed as hazardous waste. Equipment shall be considered clean when rinseate concentrations of total barium and cadmium fall below the maximum contaminant level (MCL) as promulgated for inorganics in OAC 3745-81-12. Rinseate concentrations above the MCL shall force additional cleaning of equipment.

11. The owner/operator's and independent, registered professional engineer's certifications of closure shall follow the signature requirements found in OAC 3745-50-42. The owner/operator certification of closure shall follow the exact wording found in OAC 3745-50-42(D).

1899U

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Carolyn Nicodemus Date 8/7/89

Ohio Environmental Protection Agency
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AUG 07 1989



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

Richard F. Celeste
Governor

November 7, 1988

Re: Synthetic Products Company
U.S. EPA ID No.: OHD077783603
Ohio Permit No.: 02-18-0071
Closure Plan

Synthetic Products Company
Attn: John Sundermeyer
16601 St. Clair Avenue
Cleveland, Ohio 44110

RECEIVED

NOV 18 1988

U. S. EPA, REGION V
SWB — PMS

Dear Sir:

A public notice acknowledging the Ohio EPA's receipt of a closure plan for Synthetic Products Company located at 1636 Wayside Road, Cleveland, Ohio 44112 will appear the week of November 14, 1988, in the Plain Dealer, Cleveland, Ohio. The Director of the Ohio EPA will act upon the closure plan request following the close of the public comment period, December 19, 1988.

Copies of the closure plan will be available for public review at the Cleveland Public Library, 325 Superior Avenue, Cleveland, Ohio 44114 and the Ohio EPA, Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087.

Please contact me at (614) 644-2934, if you have any questions concerning this matter.

Very truly yours,

Thomas E. Crepeau

Thomas E. Crepeau, Manager
Data Management Section
Division of Solid & Hazardous Waste Management

TEC/dhs

cc: Rebecca Strom, U.S. EPA, Region V
Randy Meyer, Ohio EPA, DSHWM, TA&ES
Dave Wertz, Ohio EPA, DSHWM, NEDO

2257R(70)

COPY 2

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State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

Richard F. Celeste
Governor

November 7, 1988

Re: Synthetic Products Company
U.S. EPA ID No.: OHD077783603
Ohio Permit No.: 02-18-0071
Closure Plan

Synthetic Products Company
Attn: John Sundermeyer
16601 St. Clair Avenue
Cleveland, Ohio 44110

RECEIVED

NOV 18 1988

U. S. EPA, REGION V
SWB — PMS

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Please contact me at (614) 644-2934, if you have any questions concerning this matter.

Very truly yours,

Thomas E. Crepeau

Thomas E. Crepeau, Manager
Data Management Section
Division of Solid & Hazardous Waste Management

TEC/dhs

cc: Rebecca Strom, U.S. EPA, Region V
Randy Meyer, Ohio EPA, DSHWM, TA&ES
Dave Wertz, Ohio EPA, DSHWM, NEDO

2257R(70)

CC-72

PUBLIC NOTICE

Cuyahoga County

RECEIPT OF HAZARDOUS WASTE CLOSURE PLAN

For: Synthetic Products Company, 1636 Wayside Road, Cleveland, Ohio 44112, U.S. EPA ID No.: OHD077783603, Ohio Permit No.: 02-18-0071. Pursuant to OAC Rule 3745-66-10 thru 17 and 40 CFR, Subpart G, 265.110 thru 117, the Ohio Environmental Protection Agency (Ohio EPA) is hereby giving notice of the receipt of a Hazardous Waste Facility Closure Plan for a storage area for the above referenced facility. Ohio EPA is also giving notice that this facility is subject to a determination concerning corrective action, a requirement under the Hazardous and Solid Waste Amendments of 1984, which concerns any possible uncorrected releases of hazardous waste or hazardous constituents to the environment from any current or previous solid waste management units at the above facility. A corrective action determination is required from hazardous waste facilities intending to close.

Copies of the facility's Closure Plan will be available for public review at the Cleveland Public Library, 325 Superior Avenue, Cleveland, Ohio 44114 and the Ohio EPA, Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087. Comments concerning the Closure Plan or factual information concerning any releases of hazardous waste or hazardous waste constituents by the above facility requiring corrective action should be submitted within 30 days of this notice to: Ohio Environmental Protection Agency, Div. of Solid & Hazardous Waste Mgmt., Data Management Section, Attn: Thomas E. Crepeau, Box 1049, Columbus, Ohio 43266-0149.

THOMPSON, HINE AND FLORY

1100 NATIONAL CITY BANK BUILDING

IN COLUMBUS, OHIO
100 EAST BROAD STREET
COLUMBUS, OHIO 43215
(614) 469-7200

IN PALM BEACH, FLORIDA
125 WORTH AVENUE
PALM BEACH, FLORIDA 33480
(407) 833-5900

629 EUCLID AVENUE

CLEVELAND, OHIO 44114-3070

(216) 566-5500 · TELEX 980217

TELECOPIER (216) 566-5583

IN WASHINGTON, D.C.
1920 N STREET, N.W.
WASHINGTON, D.C. 20036
(202) 331-8800 · TELEX 904173

WRITER'S DIRECT DIAL NUMBER

October 6, 1988

566-5820

RECEIVED
OHIO EPA

OCT 11 1988

Mr. Thomas Crepeau
Ohio EPA
P.O. Box 1049
Columbus, Ohio 43266-0149

DIV. of SOLID & HAZ. WASTE MGT.

Re: Withdrawal of Hazardous Waste Permit
US EPA ID No. OHDO77783603
Ohio Permit No. 02-18-0071

Dear Mr. Crepeau:

Synthetic Products Company, 16601 St. Clair Avenue, Cleveland, Ohio, 44110, would like to withdraw its application submitted for further licensure for a hazardous waste storage facility at their plant located at 1636 Wayside Road, Cleveland, Ohio, 44112.

Please find enclosed the closure plan which we would appreciate your reviewing and processing for approval. It is our understanding that Ohio EPA will notify the public.

Thank you for your assistance in this matter. If we can be of further assistance in expediting the closure, please do not hesitate to contact us.

Very truly yours,


Michael L. Hardy

MLH/jt
Enclosure

cc: John Sundermeyer
Synthetic Products Company

SECTION I

CLOSURE PLAN, POST-CLOSURE PLAN, AND FINANCIAL REQUIREMENTS

This section is submitted in accordance with the requirements of 40 CFR §122.25(a)(13), §264.112 through 115, and §264.178. This plan identifies all steps that will be necessary to completely close the facility at the end of its intended operating life. Partial closure is not planned and would be equivalent to final closure since there is only one hazardous waste storage area. A post-closure plan is not required because this is not a disposal facility and all wastes and residues will be removed at closure.

Synpro, a division of Dart Industries, is located in Cleveland, Ohio. The company manufactures vinyl stabilizers and metallic searates. Impure nonsalable products containing barium and cadmium are discarded and thus become hazardous wastes listed as D005 and D006, respectively. These wastes are generated before or after the filtering and drying operation in the manufacturing process. Approximately 50 percent of the hazardous wastes generated are in liquid form and the remainder are solid. Both forms are stored onsite in 55-gallon drums at the container storage building. The wastes are hauled to a permitted hazardous waste landfill or a deep well injection site by a contractor.

Hazardous waste operations at Synpro consist of a container storage building with a capacity of eighty 55-gal drums (Figure 6). Dimensions of the storage area are 30-ft by 30-ft wide. Drums may be stacked as high as 9 feet.

Synpro will retain a copy of the approved closure plan and all revisions to the plan on-site until the certification of closure has been submitted and accepted by EPA, Region V or the state regulatory agency. Synpro will notify the Regional Administrator at least 180 days prior to initiation of final closure. The closure date selected for this plan is the year 2000, however, Synpro will amend this plan if its intended operation goes beyond this date. Upon completion of closure, Synpro will submit to the Regional Administrator certification by both Synpro and a local independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

I-1 Closure Plan [40 CFR 122.25(a)(13)]

I-1a Closure Performance Standard [40 CFR 264.111]

This closure plan was designed to ensure that the facility will not require further maintenance and controls, minimizes or eliminates threats to human health and the environment, and avoids escape of hazardous waste, hazardous waste constituents or contaminated rainfall to the ground, surface waters or atmosphere. If there is evidence of any spills or leaks, samples will be taken and analyzed to determine the extent of contamination in the soil and if necessary, in groundwater. A contaminated soil

will be excavated, removed, and disposed of at a permitted hazardous waste disposal facility. The following sections discuss in detail efforts to be made at Synpro to satisfy the closure performance standard.

I-1b Partial/Final Closure Activities

Partial closure activities are the same as for final closure since this facility has only one hazardous waste storage area. In the event that future circumstances or decisions force Synpro to discontinue hazardous waste container storage activities, Section I-1d of the closure plan presents procedures for final closure of the storage area. In addition, in the event that it becomes necessary to close a portion of the storage area, the procedures presented in Section I-1d will be followed. Any modifications to our existing facility equipment, structures, instruments, or procedures related to the management of the facility will result in Synpro revising the closure plan accordingly.

At a maximum, we expect the operation could consist of storage of 80 drums during the life of the facility. Section I-1c below describes the maximum inventory of wastes in storage at any given time during the operating life of the facility. Synpro will secure permission to dispose of its wastes and enter into contractual agreements with an approved hazardous waste landfill.

I-1c Maximum Waste Inventory

The maximum inventory of hazardous wastes in storage at any given time during the operating life of Synpro would be 4,400

gallons (80 drums @ 55 gal each). Any modifications to this estimate will be handled as a minor modification under 40 CFR 122.17.

I-1d Inventory Removal and Disposal or Decontamination of Equipment

All the containers in storage will be inspected to determine if they are acceptable for transportation (according to DOT regulations) of waste off-site to a disposal facility. If containers are not acceptable for transportation, the waste will be transferred to an acceptable container.

Soils in the facility are not expected to be contaminated by container storage operations. However, the possibility of contamination while removing inventory, equipment, and structure exists. An allowance has been made in the closure costs for removal and disposal of approximately 25 yd³ of soil using a front-end loader. If evidence of possible areas of soil contamination (in the form of soil discoloration or odor) exists, a soil sampling program will be instituted to determine the extent of soil contamination in those areas. At least one soil sample will be taken near the container storage area where unloading operations occur. Auger soil boring with collected samples will be transported to a laboratory with GC/MS and atomic absorption capabilities. If contamination is found in the soil, those areas will be excavated to the depth at which insignificant contamination is detected. All soils, contaminated equipment to be disposed, and solid residues will be loaded into drums and transported by truck to a permitted hazardous waste landfill.

Prior to leaving any of the site locations undergoing decontamination, personnel protective clothing will be cleaned by removing all bulk material from the boots and spraying, washing, and scrubbing with detergent solution.

I-1d(1) Closure of Containers

All the drum containers in the Synpro container storage area will first be removed for transport to a permitted hazardous waste landfill or deep well injection. Liquids will be deep well injected and solids will be landfilled. The drums will be moved utilizing a forklift.

The container storage area (900 ft²) will be decontaminated by sandblasting. Residues of this process will be collected for EP toxicity analysis. Alternatively, if laboratory analyses indicate that the waste is hazardous, the residue will be placed in drums for transport and disposal at an approved hazardous waste landfill. If laboratory analyses show nonhazardous the residue will be disposed at a nearby sanitary landfill. Approximately one drum of residue is anticipated to results from the container area decontamination process.

I-1e Schedule for Closure

Within 30 days after storage of the final volume of hazardous wastes, final closure activities will be initiated.

Completion of closure will be within 180 days of receipt of the final volume of hazardous waste. All cost estimates are based on a closure date in the year 2000. The Regional

Administrator will be notified by Synpro 180 days before beginning final closure. The proposed schedule for closure is shown in Figure 20. Final closure will be supervised and certified by an independent registered professional engineer, in addition to the owner or operator.

I-1f Extensions for Closure Time [40 CFR 264.133(a) and 264.113(b)]

Synpro will not require a closure time extension.

I-2 Post-Closure Plans [40 CFR 122.25(a)(13)]

Post-closure care will not be required of this facility because this is not a disposal facility.

I-3 Notice in Deed and Notice to Local Land Authority [40 CFR 122.25(a)(14) and 264.119 and 264.120]

Because Synpro is only a hazardous waste storage facility and not a disposal facility, notation in deed and notice to local zoning authority are not required.

I-4 Closure Cost Estimate [40 CFR 122.25(a)(15) and 264.142]

The closure cost information presented below is submitted in accordance with the requirements of 40 CFR §122.25(a)(15), §264.142, and §264.143.

An estimated \$16,600 (1982 dollars) will be needed to close the Synpro hazardous waste storage facility. The closure costs are presented by activity in Table 6. Activities include removal/disposal of final waste inventory, decontamination of container storage area and equipment, decontamination of holding tank and sump equipment, and certification of closure. Cost

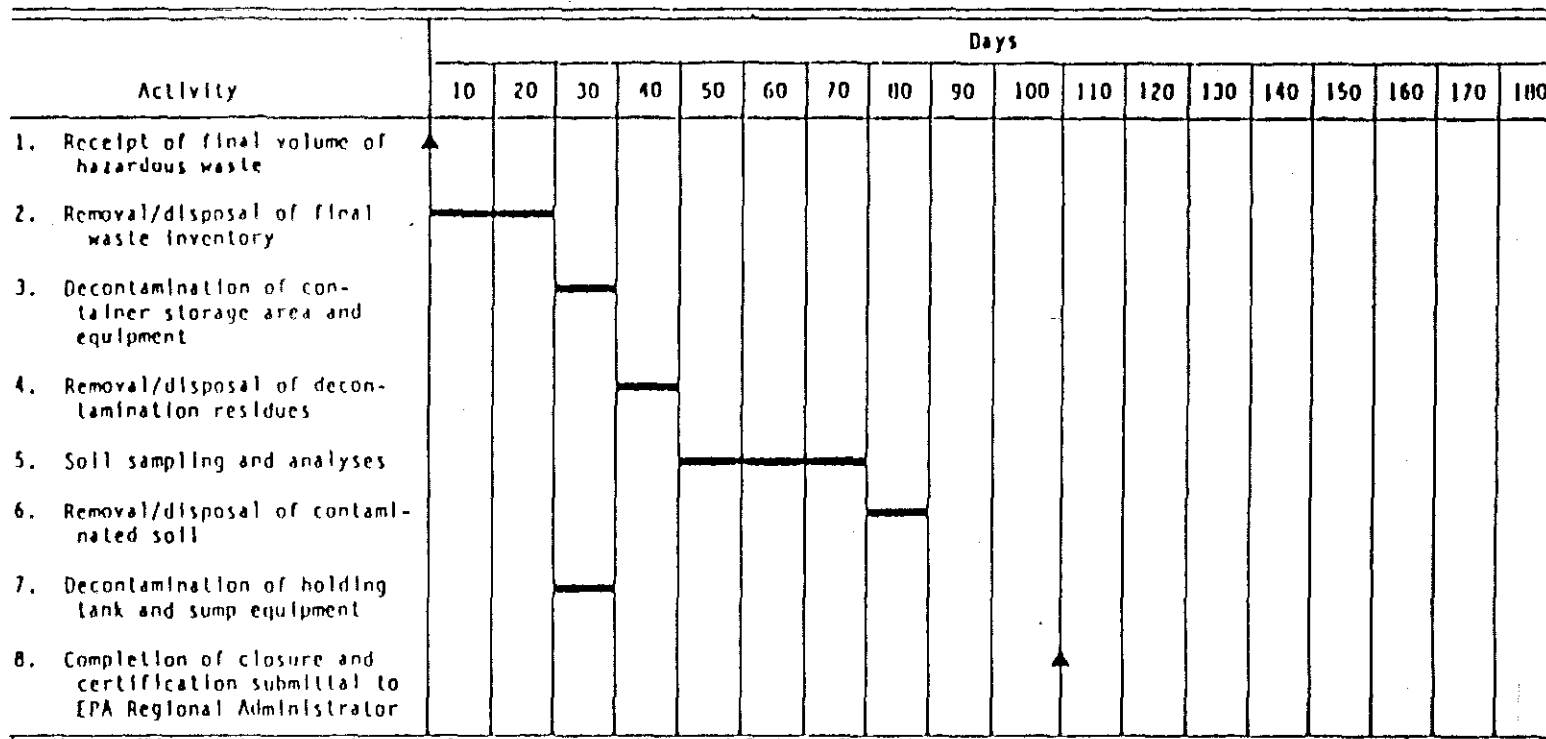


Figure 20. Closure schedule.

TABLE 6. CLOSURE COST ESTIMATE

A. Removal/Disposal of Final Waste InventoryLiquids

1. Transfer liquid wastes to process tank for loading to bulk tanker.
Labor, 64 hours @ \$17/h \$1,100
2. Transport liquid wastes to disposal site.
 - a. Labor, 2½ hours @ \$52/h \$130
 - b. Transportation, 2200 gal x 8.5 lb/gal = 18,700 lbs \$215
18,700 lbs x \$1.15/100 lbs = \$215
3. Disposal of liquids at deepwell injection site \$770
2200 gallons @ \$0.35/gal

Solids

1. Load drums of solids on truck (includes 1 drum from decontamination operations)
 - a. Labor, 1 hour @ \$17/h \$17
 - b. Equipment rental, 1 day @ \$130/day \$130
 - c. Equipment operating cost, 8 hours @ \$6.25/h \$50
2. Transport drums to disposal site
40 drums @ \$36.94/drum \$1,480
3. Disposal of solids
 - a. Disposal, 40 drums @ \$24/drum \$960
 - b. Alabama state tax, \$2/drum \$80

B. Decontamination of Container Storage Area and Equipment

1. Decontamination of storage area and equipment by sand-blasting, includes labor, equipment, and materials: \$1,600*
900 ft² @ \$1.76/ft²
2. Soil testing
 - a. Sampling, 4 borings, 2 ft/boring, 4 hours @ \$17/h \$100

* Cost for loading, transportation, and disposal is included in Item A of this table.

TABLE 6. (continued)

b. Analyses		
4 samples, each analyzed for EP toxicity, barium and cadmium @ \$15/metal		\$600
2. Removal/disposal of contaminated soil (25 yd ³)		
a.	Delivery of equipment to site	\$90
b.	Soil excavation/loading	\$100
c.	Transportation to permitted landfill	\$3,220
2 trips, 575 miles/trip @ \$2.80/loaded mile		
d.	Disposal of contaminated soil	\$2,250
25 yd ³ x 3000 lb/yd ³ x 1 ton/2000 lb = 37.5 tons		
37.5 tons @ \$60/ton		
C. <u>Decontamination of Holding Tank and Sump Equipment</u>		
		**
1.	Removal and transport of 800 gal of liquid wastes to disposal site (assume 20% capacity)	
2.	Disposal of liquid at deep well injection site	
800 gal @ \$0.35/gal		\$280
3.	Tank cleaning	
Assume 3 day for tank-cleaning crew @ \$525/day		\$260
4.	Steam clean sump equipment	
a.	Cleaner rental, 1 day @ \$33/day	\$40
b.	Labor, 5 hours @ \$17/h = \$85	\$90
D. <u>Certification of Closure</u>		
1.	16 hours professional engineer @ \$50/h	\$800
2.	Administrative and clerical 8 h x \$10/h	\$80
Subtotal		\$14,442
Contingencies @ 15%		\$2,166
Total (rounded off)		\$16,600

** Cost included in Item A of this table.

estimates for facility closure were based on the following assumptions:

- 1) Facility personnel will be used to load wastes for transport to the disposal site
- 2) Liquid wastes will be transferred from drums to a tanker truck for transport to a disposal facility.
- 3) All waste transportation will be contracted
- 4) Storage pad cleaning, soil excavation, and tank cleaning will be performed by a contractor
- 5) Sump and auxilliary equipment will be cleaned with a steam cleaner by facility personnel

References for cost estimates are listed below:

1. Soil excavation, sandblasting, steam cleaning, and equipment rental - Robert Snow Means Company, Inc. Building Construction Cost Data, 1982.
2. Labor rates for functions performed with on-site personnel - average labor rate for facility plus fringes and overhead.
3. Transportation and disposal costs -
 - ° PEDCo Environmental, Inc., Data for Reviewing Closure Costs of Hazardous Waste Storage Facilities, Draft Report. Prepared for U.S. Environmental Protection Agency. November 1982.
 - ° Booz-Allen and Hamilton, Inc., Review of Activities of Major Firms in the Commercial Hazardous Waste Management Industry: 1981 Update. Prepared for U.S. Environmental Protection Agency. May 1982.
 - ° Synpro operating experience.

This closure cost estimate will be kept on file at Synpro. It will be revised whenever a change in the closure plan affects the cost of closure. It will be adjusted annually (from the date of its original development) to reflect changes in closure cost brought about by inflation. The Department of Commerce's Annual

Implicit Prince Deflator for Gross National Product* will be used to make this adjustment.

I-5 Financial Assurance Mechanism for Closure [40 CFR Sections 122.25(a)(1), 264.143, and 264.150]

Synpro established financial assurance for closure by passing a financial test. Included as Appendix 2, is a letter from the facility's chief financial officer, an auditor's report confirming the results of the test and the auditor's opinion.

I-6 Post-Closure Cost Estimate [40 CFR Sections 122.25(a)(16) and 264.144]

Since all wastes will be disposed of offsite, there will be no post-closure activities or costs.

I-7 Financial Assurance Mechanism for Post-Closure [40 CFR Sections 122.25(a)(16) and 264.145]

Since all wastes will be disposed of offsite, there will be no post-closure activities or costs.

I-8 Liability Insurance [40 CFR Sections 122.25(a)(17) and 264.147]

Synpro has required documents demonstrating liability insurance for sudden occurrences in the amount of \$1 million per occurrence, with an annual aggregate of \$2 million, exclusive of legal defense costs.

* Published by U.S. Department of Commerce in its monthly publication, "Survey of Current Business."